

WHAT IS CLAIMED IS:

1. A photograph printing device which, by projecting light onto a photosensitive material through an information holding medium which holds original image information, prints onto said photosensitive material an image corresponding to the original image information;

 said photograph printing device including a light source for projecting light onto said information holding medium;

 said light source including a plurality of light emitting means having different respective spectral characteristics; and

 each said light emitting means being provided so as to incline with respect to a light axis, so that light emitted by said light emitting means has directivity toward the light axis.

2. The photograph printing device set forth in claim 1, wherein:

 said light source includes a plurality of clusters, each made up of a plurality of said light emitting means; and

 each said cluster includes at least one said light emitting means which emits red light, at least one said

SEARCHED - INDEXED - SERIALIZED - FILED

light emitting means which emits green light, and at least one said light emitting means which emits blue light.

3. The photograph printing device set forth in claim 2,
wherein:

~~said light emitting means which emit red light are provided in positions in each cluster closest to the light axis.~~

4. The photograph printing device set forth in claim 2,
wherein:

when brightness of said light emitting means is constant, respective durations of illumination of said light emitting means emitting light of each color are set to a ratio of red : green : blue = 5-6:2:1.

5. The photograph printing device set forth in claim 2,
wherein:

when duration of illumination of said light emitting means is constant, respective brightnesses of said light emitting means emitting light of each color are set to a ratio of red : green : blue = 5-6:2:1.

6. The photograph printing device set forth in claim 2,
wherein:

a product of brightness and duration of illumination
of said light emitting means emitting light of each color
are set to a ratio of red : green : blue = 5-6:2:1.

7. The photograph printing device set forth in claim 1,
wherein:

said light emitting means are light emitting diodes,
and, for each said light emitting diode, at least one of
emitted light quantity, viewing angle, inclination, and
wavelength of emitted light can be adjusted.

8. The photograph printing device set forth in claim 1,
wherein:

said light source includes a plurality of clusters,
each made up of a plurality of said light emitting means;
and

each said cluster has a specific light projection
area on the photosensitive material.

9. The photograph printing device set forth in claim 8,
further comprising:

control means, which control quantity of light
emitted by said light emitting means of each said

cluster.

10. The photograph printing device set forth in claim 8,
further comprising:

a diaphragm member, which adjusts viewing angle of
said light emitting means of each said cluster.

11. The photograph printing device set forth in claim 8,
wherein:

angle of inclination and wavelength of emitted light
of said light emitting means can be adjusted for each
said cluster.

12. The photograph printing device set forth in claim 1,
further comprising:

light condensing means, which condense light from
said light source onto said information holding means.

13. The photograph printing device set forth in claim
12, wherein:

said light condensing means are a condensing lens.

14. The photograph printing device set forth in claim
13, wherein:

said condensing lens is provided between said light

4005404-012502

source and said information holding medium; and

said light source is provided within a range in which light from said light source is projected through said condensing lens onto a single point on the photosensitive material, at a position within that range closest to said condensing lens.

15. The photograph printing device set forth in claim 1, further comprising:

a fixing substrate, to which said light emitting means are fixed; and

a reflecting member, which reflects toward said photosensitive material light, among light projected by said light emitting means, which is projected toward said fixing substrate.

16. An electronic image input device comprising:

the photograph printing device set forth in claim 1; and

image pickup means, which pick up light from said light emitting means obtained through said information holding medium.

17. The electronic image input device set forth in claim 16, further comprising:

support means, which support said image pickup means, and interpose said image pickup means into and withdraw said image pickup means from a light path between said light source and the photosensitive material.

18. The electronic image input device set forth in claim 16, wherein said light source comprises:

a light source for printing, which projects light onto the photosensitive material through the information holding medium; and

a light source for image pickup, which projects light onto said image pickup means through the information holding medium;

said light source for printing and said light source for image pickup being provided separately.

19. A film scanner comprising:

a first light source, which projects light onto film recording an original image;

scanning means, which register an image corresponding to the original image by scanning light transmitted through the film; and

light compensating means, which compensate insufficient light quantity due to disturbance of a light

40000000000000000000000000000000

path from said first light source to said scanning means by an irregularity in the surface of the film, which causes an image of the irregularity to be formed in said scanning means, using the disturbance of the light path caused by the irregularity.

20. The film scanner set forth in claim 19, wherein:
said light compensating means are provided in a domain on the opposite side of the film from said scanning means, from which light projected by said light compensating means does not reach said scanning means after passing through the film.
21. The film scanner set forth in claim 19, wherein:
said light compensating means are a second light source including a plurality of light emitting means having different respective spectral characteristics.
22. The film scanner set forth in claim 21, wherein:
emitted light quantity of said second light source can be changed as desired.
23. The film scanner set forth in claim 19, wherein:
said first light source includes a plurality of light emitting means having different respective spectral

P0054904.042502

characteristics.

24. The film scanner set forth in claim 23, wherein:
said light emitting means of said first light source
are provided so that light emitted thereby has
directivity in a plurality of directions intersecting
with a light axis from said first light source to said
scanning means.

25. The film scanner set forth in claim 24, further
comprising:

directivity direction adjusting means, which adjust
a direction of directivity of light emitted by said light
emitting means of said first light source.

26. The film scanner set forth in claim 19, wherein:
said light emitting means provided in said first
light source and in said light compensating means are
light emitting diodes.

27. The film scanner set forth in claim 19, further
comprising:

light condensing means, which condense light
incident thereon onto said scanning means through the
film;

wherein said first light source is moveable along a light axis between said first light source and said scanning means.

28. The film scanner set forth in claim 19, wherein: said first light source and said light compensating means are moveable along a light axis between said first light source and said scanning means.

29. A scratch recognition method comprising the steps of:

projecting light onto film recording an original image; and
recognizing the existence of a scratch area formed on the film by scanning light obtained through the scratch area.

30. A memory medium recording a scratch recognition program which causes a computer to recognize the existence of a scratch area, formed on film recording an original image, by projecting light onto the film, and scanning light obtained through the scratch area.

31. An image restoration method comprising the steps of:

(a) projecting light onto film recording an original

1000348047 042508

image, and scanning light obtained through a scratch area formed on the film;

(b) after said step (a), projecting onto the film light differing from the light projected in said step (a), and scanning light passing through areas of the film other than the scratch area; and

(c) bringing density of an image obtained in said step (a) into conformity with density of an image obtained in said step (b)

32. The image restoration method set forth in claim 31, wherein:

said step (c) is performed by changing an emitted light quantity in accordance with a quantity of light scanned in step (a).